SECTION 1 IDENTITY OF MATERIAL

Trade Name: CARLON CLEAR PRIMER - NSF Product Numbers: VC9902, VC9903, VC9904

Formula: Organic Solvents

Synonyms: Methyl Ethyl Ketone, Cyclohexanone, Acetone and Tetrahydrofuran

Firm Name & CARLON c/o Oatey Co. 4700 West 160th Street Mailing Address: P.O. Box 35906 Cleveland, Ohio 44135, U.S.A.

Oatey Phone Number: (216) 267-7100

Emergency Phone For Emergency First Aid call 1-303-623-5716 COLLECT. For

Numbers: chemical transportation emergencies ONLY, call Chemtrec at

1-800-424-9300

SECTION 2 COMPOSITION

| INGREDIENTS: | %: CAS NUMBER: | ACGIH TLV TWA: | OSHA PEL | TWA: OTHER: |
|---------------------|-------------------|----------------|----------|--------------|
| Acetone | 0 - 1% 67-64-1 | 500 ppm | 1000 ppm | |
| | | 750 ppm STEL | | |
| Cyclohexanone | 15 - 20% 108-94-1 | 25 ppm(skin) | 50 ppm | |
| Tetrahydrofuran | 10 - 15% 109-99-9 | 200 ppm | 200 ppm | 25 ppm (Mfg) |
| | | 750 ppm STEL | | |
| Methyl Ethyl Ketone | 70 - 80% 78-93-3 | 200 ppm | 200 ppm | |

SECTION 3 EMERGENCY OVERVIEW

Clear liquid with an ether-like odor. Extremely flammable liquid and vapor. Vapors may cause flash fire. May cause eye and skin irritation. Inhalation of vapors or mist may cause respiratory irritation and central nervous system effects. Swallowing may cause irritation, nausea, vomiting, diarrhea and kidney or liver disorders. Aspiration hazard. May be fatal if swallowed. Symptoms may be delayed.

NFPA Hazard Signal: Health: 2 Stability: 1 Flammability: 3 Special: None HMIS Hazard Signal: Health: 3 Stability: 1 Flammability: 3 Special: None

OSHA Hazard Classification: Flammable, irritant, organ effects

Canadian WHIMS Classification: Class B, Division 1; Class D, Division 2,

Subdivision B

SECTION 4 EMERGENCY AND FIRST AID PROCEDURES - CALL 1-303-623-5716 COLLECT

Skin: Remove contaminated clothing immediately. Wash all exposed areas with soap and water. Get medical attention if irritation develops. Remove

dried cement with Oatey Plumber's Hand Cleaner or baby oil.

Eyes: If material gets into eyes or if fumes cause irritation, immediately flush eyes with water for 15 minutes. If irritation persists, seek

medical attention.

Inhalation: If symptoms of exposure develop, remove to fresh air. If breathing

becomes difficult, administer oxygen. Administer artificial

respiration if breathing has stopped. Seek immediate medical attention.

Ingestion: DO NOT INDUCE VOMITING. Rinse mouth with water. Never give anything

by mouth to a person who is unconscious or drowsy. Get immediate medical attention by calling a Poison Control Center, or hospital emergency room. If medical advice cannot be obtained, then take the person and product to the nearest medical emergency treatment center

or hospital.

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FIRE FIGHTING MEASURES

Flashpoint / Method: 0 - 5 Degrees F. / PMCC

Flammability: LEL = 1.8 % Volume, UEL = 11.5 % Volume

Use dry chemical, CO2, or foam to extinguish fire. Cool fire Extinguishing Media: exposed container with water. Water may be ineffective as an

extinguishing agent.

Special Fire Firefighters should wear positive pressure self-contained breathing apparatus and full protective clothing for fires in Fighting

Procedure: areas where chemicals are used or stored

Unusual Fire and Extremely flammable liquid. Keep away from heat and all Explosion sources of ignition including sparks, flames, lighted Hazards: cigarettes and pilot lights. Containers may rupture or

explode in the heat of a fire. Vapors are heavier than air and may travel to a remote ignition source and flash back. This product contains tetrahydrofuran that may form explosive organic peroxide when exposed to air or light or with age. Combustion will produce toxic and irritating vapors including

Hazardous carbon monoxide, carbon dioxide and hydrogen chloride. Decomposition

Products:

SECTION 6 ACCIDENTAL RELEASE MEASURES

Remove all sources of ignition and ventilate area. Stop leak if it Spill or Leak can be done without risk. Personnel cleaning up the spill should

Procedures: wear appropriate personal protective equipment, including respirators

> if vapor concentrations are high. Soak up spill with an inert absorbent such as sand, earth or other non-combusting material. Put absorbent material in covered, labeled metal containers. Prevent liquid from entering watercourses, sewers and natural waterways. Report releases to authorities as required. See Section 12 for

disposal information.

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin and clothing. Avoid breathing vapors

> or mists. Use with adequate ventilation (equivalent to outdoors). Wash thoroughly after handling. Do not eat, drink or smoke in the work area. Keep product away from heat, sparks, flames and all other

sources of ignition. No smoking in storage or use areas. Keep

containers closed when not in use.

Store in a cool, dry, well-ventilated area away from incompatible Storage:

materials. Keep containers closed when not in use.

Other: "Empty" containers retain product residue and can be hazardous.

Follow all MSDS precautions in handling empty containers. Do not cut

or weld on or near empty or full containers.

SECTION 8 ECOLOGICAL INFORMATION

This product is not expected to be toxic to aquatic organisms. Cyclohexanone: 96 hour LC50 values for fish is over 100 mg/l. Tetrahydrofuran: 96 hour LC50 fathead minnow: 2160 mg/L.

Methyl Ethyl Ketone: 96 hour LC50 for fish is greater than 100 mg/L.

Acetone: 96 hour LC50 for fish is greater than 100 mg/L.

This product emits VOC's (volatile organic compounds) in its use. VOC Information: Make sure that use of this product complies with local VOC emission

regulations, where they exist.

VOC Level: 600 g/l per SCAQMD Test Method 316A.

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SECTION 9 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation: Open doors & windows. Provide ventilation capable of maintaining

emissions at the point of use below recommended exposure limits. If used in enclosed area, use exhaust fans. Exhaust fans should be explosion-proof or set up in a way that flammable concentrations of

solvent vapors are not exposed to electrical fixtures or hot

surfaces.

Respiratory For operations where the exposure limit may be exceeded, a NIOSH

Protection: approved organic vapor respirator or supplied air respirator is recommended. Equipment selection depends on contaminant type and concentration, select in accordance with 29 CFR 1910.134 and good industrial hygiene practice. For firefighting, use self-contained

breathing apparatus.

Skin Rubber gloves are suitable for normal use of the product. For long

Protection: exposures product chemical resistant gloves may be required such as

4H(tm) or Silver Shield(tm) to avoid prolonged skin contact.

Eye Safety glasses with sideshields or safety goggles.

Protection:

Other: Eye wash and safety shower should be available.

SECTION 10 PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 174 Degrees F / 79 C

Melting Point: N/A

Vapor Pressure: 70 mmHg @ 20 Degrees C

Vapor Density: (Air = 1) 2.5

Volatile Components: 100% Solubility In Water: 28 parts

pH: N/A

Specific Gravity: 0.84 +/- 0.02

Evaporation Rate: (BUAC = 1) = 5.5 - 8.0

Appearance: Clear Liquid Odor: Ether-Like

Will Dissolve In: Water, organic solvents

Material Is: Liquid

SECTION 11 STABILITY AND REACTIVITY

Stability: Stable.

Conditions To Avoid: Avoid heat, sparks, flames and other sources of ignition.

Hazardous Combustion will produce toxic and irritating vapors
Decomposition including carbon monoxide, carbon dioxide and hydrogen

Products: chloride.

Incompatibility/ Oxidizing agents, alkalies, amines, ammonia, acids, chlorine Materials To Avoid: compounds, chlorinated inorganics (potassium, calcium and

sodium hypochlorite) and hydrogen peroxides. May attack

plastic, resins and rubber.

Hazardous Will not occur.

Polymerization:

SECTION 12 DISPOSAL INFORMATION

Waste Disposal: Dispose in accordance with current local, state and federal

regulations.

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SECTION 13 TOXICOLOGICAL INFORMATION

Inhalation: Vapors or mists may cause mucous membrane and respiratory

> irritation, coughing, headache, dizziness, dullness, nausea, shortness of breath and vomiting. High concentrations may cause central nervous system depression, narcosis and unconsciousness.

May cause kidney, liver and lung damage.

Skin: May cause irritation with redness, itching and pain. Methyl

ethyl ketone and cyclohexanone may be absorbed through the skin

causing effects similar to those listed under inhalation.

Eye: Vapors may cause irritation. Direct contact may cause irritation

with redness, stinging and tearing of the eyes. May cause eye

Swallowing may cause abdominal pain, nausea, vomiting and Ingestion:

diarrhea. Aspiration during swallowing or vomiting can cause chemical pneumonia and lung damage. May cause kidney and liver

damage.

Chronic Prolonged or repeated overexposure cause dermatitis and damage

to the kidney, liver, lungs and central nervous system. Toxicity:

Toxicity Data: Acetone: Oral rat LD50: 5,800 mg/kg

Inhalation rat LC50: 50,100 mg/m3/8 hours

Oral rat LD50: 1,620 mg/kg Cyclohexanone:

Inhalation rat LC50: 8,000 ppm/4 hours

Skin rabbit LD50: 1 mL/kg

Tetrahydrofuran: Oral rat LD50: 1,650 mg/kg

Inhalation rat LC50: 21,000 ppm/3 hours

Methyl Ethyl Ketone: Oral rat LD50: 2,737 mg/kg

Inhalation rat LC50: 23,500 mg/m3/8 hours

Skin rabbit LD50: 6,480 mg/kg

None of the components are known to cause sensitization. Sensitization:

None of the components are listed as a carcinogen or suspect Carcinogenicity:

> carcinogen by NTP, IARC or OSHA. The National Toxicology Program has reported that exposure of mice and rats to Tetrahydrofuran (THF) vapor levels up to 1800 ppm 6 hr/day, 5 days/week for their lifetime caused an increased incidence of kidney tumors in male rats and liver tumors in female mice. The significance of these findings for human health are unclear at this time, and

may be related to "species specific" effects. Elevated

incidences of tumors in humans have not been reported for THF.

Acetone has been positive in a mammal cell cytogenic analysis but negative in many other assays. At most, acetone is weakly genotoxic. Cyclohexanone has been positive in bacterial and mammalian assays. Tetrahydrofuran was positive in a bacterial

assay. Methyl ethyl ketone is not considered genotoxic based on

laboratory studies.

Reproductive Methyl ethyl ketone and cyclohexanone have been shown to cause Toxicity: embryofetal toxicity and birth defects in laboratory animals.

> Acetone and tetrahydrofuran have been found to cause adverse developmental effects only when exposure levels cause other

toxic effects to the mother.

Medical Persons with pre-existing skin, lung, kidney or liver disorders

Conditions may be at increased risk from exposure to this product.

Aggravated By Exposure:

Mutagenicity:

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TRANSPORTATION INFORMATION SECTION 14

DOT Less than 1 Liter (0.3 gal) Greater than 1 Liter (0.3 gal)

Proper Shipping Name: Consumer Commodity Adhesives Hazard Class/Packing Group: ORM-D 3, PGII UN/NA Number: None UN1993

Hazard Labels: None Flammable Liquid

TMDG

Proper Shipping Name: Flammable Liquid, N.O.S. Flammable Liquid, N.O.S.

Hazard Class/Packing Group: 3, II 3, II UN Number: UN1993 UN1993

Label: None (Limited Quantities Class 3 (Flammable

> are excepted Liquid)

from labeling)

RCRA Hazardous Waste Number: U002, U057, U159, U213 EPA Hazardous Waste ID Number: D001, D035, F003, F005

EPA Hazard Waste Class: Ignitable Waste. Toxic Waste (Methyl Ethyl Ketone content)

2000 North American Emergency Response Guidebook Number: 127 or 128

REGULATIONS SECTION 15

Hazard Category for Section Acute Health, Chronic Health, Flammable

311/312:

Section 302 Extremely

Hazardous Substances (TPQ):

This product does not contain chemicals regulated

under SARA Section 302.

Section 313 Toxic Chemicals: This product contains the following chemicals

subject to SARA Title III Section 313 Reporting

requirements:

Chemical CAS # Methyl Ethyl Ketone $78-9\overline{3}-3$ 70-80%

CERCLA 103 Reportable

Quantity:

Spills of this product over the RQ (reportable quantity) must be reported to the National Response Center. The RQ for the product, based on the RQ for Methyl Ethyl Ketone (80% maximum) of 5,000 lbs, is 6,250 lbs. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65:

This product contains trace amounts of chemicals known to the State of California to cause cancer. Under normal use conditions, exposures to these chemicals at levels above the State of California "No Significant Risk Level" (NSRL) are unlikely. Oatey strongly encourages the use of proper personal

protective equipment (PPE) and ventilation

guidelines noted in Section 9 to minimize exposure

to these chemicals.

All of the components of this product are listed on TSCA Inventory:

the TSCA inventory.

DISCLAIMER SECTION 16

The information herein has been compiled from sources believed to be reliable, upto-date, and is accurate to the best of our knowledge. However, Oatey cannot give any quarantees regarding information from other sources, and expressly does not make warranties, nor assumes any liability for its use.

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